

Medical Science

To Cite:

Almalki MA, Alzahrani AJ, Alghamdi AA, Alqahm MG. A cross-sectional study exploring the relationship between burnout, absenteeism, and job performance among Saudi Arabian nurses. *Medical Science* 2024; 28: e151ms3467
doi: <https://doi.org/10.54905/dissi.v28i154.e151ms3467>

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Peer-Review History

Received: 01 September 2024
Reviewed & Revised: 05/September/2024 to 07/December/2024
Accepted: 11 December 2024
Published: 18 December 2024

Peer-review Method

External peer-review was done through double-blind method.

Medical Science

eISSN 2321-7359; ISSN 2321-7367



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A cross-sectional study exploring the relationship between burnout, absenteeism, and job performance among Saudi Arabian nurses

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ABSTRACT

Background: Long-term stress at work can lead to burnout, a syndrome marked by a lack of energy, cynicism about one's job, and a decline in professional ability.

Aim: The study assesses the relationship between burnout, absenteeism, and job performance among Saudi Arabian nurses. **Methods:** A cross-sectional study using a self-administered questionnaire. Along with demographic questions (age, gender, marital status (single, married, widowed), parental status, practice characteristics, and standardized instruments to measure absenteeism, work performance, burnout, depression, and fatigue, the survey also included questions about work-life balance satisfaction. **Results:** A total of 408 nurses participated in this study. The mean age was 38.2 years (SD 3.2), and the majority were male (60.5%). Most participants resided in the Western region (82.4%). Among those reporting absenteeism, some missed 1 day, while others missed more than 1 day due to personal health problems. **Conclusion:** Nurses experiencing burnout were more likely to report absenteeism than those without burnout. Most nurses rated themselves as high performers (score of 9 or higher), some rated themselves as medium performers (score of 8), and others rated themselves as poor performers (score of 7 or lower).

Keywords: Burnout, absenteeism, nursing, and work performance.

1. INTRODUCTION

Burnout is a prolonged reaction to ongoing emotional and interpersonal stressors at work. It arises when the person fails to cope with the chronic job stress adequately. Burnout is defined by three main aspects: Emotional exhaustion,

depolarization and a marked reduction in perceived professional accomplishment (Laureano-Morales et al., 2024). The risk of burnout among nurses is raised by an excessive workload, insufficient staffing, conflicts in values, inadequate incentives, and an unfavorable work environment (such as low autonomy, little administrative support, and unfavorable physician-nurse interactions) (Dyrbye et al., 2017; Aiken et al., 2012; Woodhead et al., 2016; Pisanti et al., 2016). Stress in the workplace is associated with negative outcomes such as reduced physical health, emotional burnout, depolarization, hopelessness, and apathy that lead to poor job satisfaction, lower feelings of accomplishment, absenteeism, and increased staff turnover (Wang et al., 2020; Hunsaker et al., 2015).

According to a survey conducted by the American Nurses Association, it found that about 74% (4614) of nurses reported that stress and overwork were among the primary concerns regarding their safety and health. Also, in China, a study found that 74.8% of nurses suffered from stress due to work (Xie et al., 2011). With approximately 33% of the workforce in the healthcare industry, nurses are the largest group of licensed healthcare practitioners in Saudi Arabia (Alluhidan et al., 2020). Emotional weariness, depersonalization, and decreased productivity are symptoms of burnout that people encounter at work (Labrague et al., 2020). There is serious worry about the detrimental impact of burnout on nurses' job performance and patient safety. Nurses who are physically and mentally exhausted are more likely to make mistakes when providing patient care, which might have serious consequences (Sarıköse and Göktepe, 2022; Shin and Cho, 2021).

The type and degree of the relationship between burnout among nurses and their capacity to perform their duties well are unclear. Some studies found a correlation between job burnout and poorer practical performance, whereas others found no association (Yosiana et al., 2020; Uchmanowicz et al., 2020). However, there are many significant limitations to earlier research, such as the fact that it was done outside of the United States or more than ten years ago, that it only looked at the emotional exhaustion domain of burnout, that it used small sample sizes of nurses from a single specialty or practice setting, and that it was unable to take potential confounding factors like fatigue and mood disorders into account (Parker and Kulik, 1995; Demerouti et al., 2009; Bekker et al., 2005; Firth and Britton, 1989). None has focused on the relationship between burnout, absenteeism, and job performance in Saudi Arabia. The aim of the study is to assess the relationship between burnout, absenteeism, and job performance among Saudi Arabian nurses.

2. METHODOLOGY

Study design and setting

A self-administered questionnaire was used in this quantitative cross-sectional investigation. Which was done in various locations throughout Saudi Arabia.

Survey population

Inclusion criteria

Participation was voluntary and all responses were anonymous.

Nurses with an associate degree or above (e.g., Master's degree in nursing, Doctor of Nursing practice, or Doctor of Nursing).

Nurses without practice certifications, such as certified nurse practitioners, certified nurse midwives, certified registered nurse anesthetists, and clinical nurse specialists.

Exclusion criteria

Advanced instruction Given their more comprehensive area of practice, providers' contributions to and outcomes from job stress probably differ from those of other nurses.

Sample size estimation

We determined a total of 408 participants. More surveys are needed to have a confidence level of 95% that the real value is within $\pm 5\%$ of the surveyed participants.

Data collection tool and technique

A convenience sampling method was employed to recruit participants from various healthcare settings. Participants were required to complete a self-administered questionnaire, which was designed to collect demographic information and assess the key variables of

burnout, absenteeism, and job performance. The questionnaire was divided into two main sections. The first section collected demographic information, including age, gender, living region, level of education, and marital status. The second part of the questionnaire consisted of two scales derived from the Health and Performance Questionnaire (HPQ). We used the short form of (Absenteeism and presenteeism question). The reliability of the Health and Performance Questionnaire (HPQ) has been well-established through multiple studies.

It has demonstrated high internal consistency, with Cronbach's alpha values typically exceeding 0.80 for the key scales, indicating reliable measurement of constructs such as absenteeism and work performance (Kessler et al., 2003). Additionally, test-retest reliability has been found to be robust, further supporting the stability and consistency of the HPQ over time (Kessler et al., 2004). These findings confirm the HPQ as a reliable tool for assessing workplace health outcomes. The questionnaire consists of 11 questions which measure two aspects of health and work performance. The first scale measured absenteeism due to personal health in the past month. The second scale assessed work performance, measuring the self-reported ability of participants to perform their duties effectively in relation to their physical and emotional health.

The Absenteeism parts was divided into two groups: One for participants who had no absenteeism (0 days) and another for those who had taken more than one day off. Participants were asked to rate their work performance on a scale ranging from 0 (worst performance) to 10 (best performance). High performers were classified as those who rated their work performance between 8 and 10, indicating consistently excellent performance. Medium performers were classified as those who rated their work performance between 4 and 7, suggesting an average level of performance. Poor performers were classified as those who rated their performance between 0 and 3, reflecting lower levels of work performance. To gauge burnout, we employed the entire 22-item Maslach Burnout Inventory (MBI) Human Services Survey (Johns and Miraglia, 2015). Three subscales comprised the MBI: Poor feeling of personal accomplishment, depersonalization, and emotional weariness.

The frequency with which respondents had experienced certain job-related emotions was inquired about (options never include a few times a year or less, once a month or less, a few times a month, once a week, a few times a week, and every day). The MBI handbook Maslach et al., (1997) and it was most recent summary Hvalič-Touzery et al., (2020) include information on the psychometric qualities of the test (reliability coefficients, test-retest reliability, convergent validity, and discriminant validity) among human service workers. We measured tiredness using a standardized linear analog scale (0 = "As bad as it can be"; 10 = "As good as it can be"), which was like the method outlined by (West et al., 2009). A lower score denotes a higher level of weariness (Aitken, 1969). Numerous demographics and medical problems have shown widespread validation in standardized linear analog scales (Singh et al., 2014; Rummans et al., 2006; Sloan et al., 2012; Locke et al., 2007; Sloan et al., 1998).

Statistical analysis

We used IBM SPSS statistics software to run out the analysis. The categorical variable was described as frequency and percentage. For the continuous variable, we used Shapiro-wilk test to test the normality of the data. The continuous variables were described as mean and standard deviation. The relationship between absenteeism and work performance among nurses with and without burnout was analyzed using Unadjusted Odds Ratios (OR) with 95% Confidence Intervals (CI). In this analysis, burnout (presence or absence) was treated as the dependent variable.

The independent variables included absenteeism due to personal health in the last month, categorized as No absenteeism (0 days) versus absenteeism (1+ days), and work performance in the last month, categorized as High, medium and poor performance. For absenteeism, the reference group was nurses reporting 0 days of absenteeism in the last month. For work performance, the reference group was nurses categorized as exhibiting high performance. The unadjusted odds ratio (OR) was calculated for both absenteeism and work performance, with 95% confidence intervals (CI) to assess the strength and direction of the associations between burnout and these outcomes.

3. RESULTS

Demographics and Descriptive Results

A total of 408 nurses participated in this study. The mean age was 38.2 years (SD 3.2), and the majority were male (60.5%). Most participants resided in the Western region (82.4%). Regarding education, 64.7% had a Bachelor's degree, 23.5% had a diploma, and

11.8% held a Master's degree. Most nurses were married (94.1%), and 94.1% reported having children. The average number of hours worked in the past 28 days was 103.8 (SD 42.2). Most participants (64.7%) worked in general nursing roles, with smaller percentages working in university hospitals, clinics, and other settings. The demographic characteristics of the participants are presented in (Table 1).

Table 1 Demographic characteristics

Variables	Sample size (n=408)	
Age, mean (SD)	38.2 (3.2)	
Gender, N (%)	Male	247 (60.5)
	Female	161 (39.5)
Living region, N (%)	Western	336 (82.4)
	Southern	72 (17.6)
Highest level of education, N (%)	Diploma	96 (23.5)
	Bachelor's degree	264 (64.7)
	Master	48 (11.8)
Marital status	Single	24 (5.9)
	Married	384 (94.1)
Have a (child/children)	Yes	384 (94.1)
	No	24 (5.9)
Workplace	Nursing	264 (64.7)
	University hospital	24 (5.9)
	Nursing technician	28 (6.8)
	Clinics	20 (4.9)
	Health center	24 (5.9)
	Nursing affairs	48 (11.8)
Hours of work last 28 days		103.8 (42.2)

Absenteeism and Job Performance

Absenteeism was reported by 21.6% of the participants. Among those reporting absenteeism, some missed 1 day, while others missed more than 1 day due to personal health problems. Most nurses (52.7%) rated themselves as high performers (score of 9 or higher), 29.4% rated themselves as medium performers (score of 8), and 17.9% rated themselves as poor performers (score of 7 or lower).

Associations with Burnout

Among the 408 participants, 143 (35%) reported symptoms of burnout. Nurses experiencing burnout were more likely to report absenteeism (37.1%) than those without burnout (13.2%) (OR 3.42, 95% CI 2.02–5.81) (Table 2). Burnout was also significantly associated with poorer job performance. Only 31.5% of nurses with burnout rated themselves as high performers, and 64.2% of those without burnout. Furthermore, compared to 13.2% of nurses without burnout, 26.6% of burnout nurses assessed themselves as poor performance (OR 4.97, 95% CI 2.83–8.74).

Table 2 Absenteeism and Work Performance among Nurses with and without Burnout

Characteristics	Burnout (N = 143)	No Burnout (N = 265)	Unadjusted Odds Ratio (95% CI)
Absenteeism due to personal health in the last month, No. (%)			
0 days	90 (62.9%)	230 (86.8%)	Reference
≥1 days	53 (37.1%)	35 (13.2%)	3.42 (2.02–5.81)
Work performance in the last month, No. (%)			
High performer (Score 9-10)	45 (31.5%)	170 (64.2%)	Reference
Medium performer (Score 8)	60 (42.0%)	60 (22.6%)	3.78 (2.21–6.46)
Poor performer (Score 7 or below)	38 (26.6%)	35 (13.2%)	4.97 (2.83–8.74)

4. DISCUSSION

The study evaluates the connection between Saudi Arabian nurses' job performance, absenteeism, and burnout. We found that 35% reported symptoms of burnout. Nurses experiencing burnout were more likely to report absenteeism (37.1%) than those without (13.2%). Burnout was also significantly associated with poorer job performance. Only 31.5% of nurses with burnout rated themselves as high performers, and 64.2% of those without burnout. Additionally, 26.6% of nurses with burnout rated themselves as poor performers, and 13.2% of those without. In terms of work performance, the study classified nurses into high, medium, and poor performers based on self-reported ratings. However, this self-reported classification could also be subject to social desirability bias, where participants may overestimate their performance.

Our results are consistent with research that indicated burnt-out nurses were more likely to have poor job performance and to have missed one or more workdays in the previous month. Even after regulating for factors like age, sex, parental status, relationship, highest academic degree, practice setting, burnout, depression, and satisfaction with work-life integration, nurses who reported feeling more fatigued were more likely to have missed work than those who worked more extended changes. Fatigue and burnout were independently related to poor work performance (Dyrbye et al., 2019). Our results are inconsistent with a prior study as relationship between burnout and absenteeism was not discovered. However, personal health-related absences from work were rare in this group, and it is impossible to rule out a clinically significant relationship between burnout and absenteeism due to the large confidence interval surrounding this effect estimate (Higgins, 2008).

According to a recent European study, burnout may predict nurses' later absence (Toppinen-Tanner et al., 2005). Longitudinal studies have demonstrated that burnout and poor job performance among non-healthcare workers are predictive factors for future absences from work (Oehler et al., 1991). These results suggest that burnout is still among nurses and affects performance. After controlling for country and hospital grouping, a previous study of inpatient nurses in North Carolina found a correlation between absenteeism, medication errors, and patient falls. Older nurses were less likely to report absenteeism, while full-time, overtime, and the perception of inadequate staffing on their unit were associated with higher rates of absenteeism. Significant correlations between job support, stress, and burnout symptomology were discovered in a prior study (Ogus, 1990; Lazaro et al., 1984).

In our sample of registered nurses, lower levels of perceived social support from coworkers and higher job stress were associated with higher levels of experienced burnout (emotional fatigue and decreased personal accomplishment). They also extend and provide light on the relationship between burnout and different aspects of job performance; the fact that they discovered these relationships even after statistically controlling for negative affectivity suggests that they are unlikely to be the result of response bias alone. This possibility that had been left open by earlier work. An assumption often made but rarely confirmed is that job performance declines when one experiences burnout giving a new perspective on the connection between absence and burnout compared to what has been previously published.

Although the contradictory results caused by different research populations, a study conducted on a sample of childcare providers found that burnout symptoms were correlated with self-perceived performance but not supervisor-related performance (Lazaro et al., 1984). Considering the previous constraints, our findings might potentially offer the most substantial evidence to date that a component of burnout, specifically emotional depletion, is genuinely linked to objective work performance. Higher degrees of burnout were linked

to higher absenteeism, according to an earlier study (Parker and Kulik, 1995). After analyzing the causes behind the absences, they discovered that emotional tiredness levels were more closely associated with absences due to mental health issues than with absences linked to physical health issues.

They think this is a potentially significant theoretical advancement, and that further work should be done to differentiate between the physical and mental causes of absenteeism in burnout research (Toppinen-Tanner et al., 2005). Our research is limited by the cross-sectional study design, which restricts our ability to establish a causal relationship between burnout and job performance. The study may not have captured all possible contributing factors or causes, as the cross-sectional nature did not allow for long-term observation of these variables. Furthermore, the reliance on self-reported data introduces the possibility of bias, as participants may have underreported or overreported their experiences due to social desirability or recall bias.

Also, there was a difference in the gender distribution of the study as most of the participants were males, which is not consistent with the gender distribution of the nurse-worker in Saudi. Lastly, the convenience sampling method limits the generalizability of the findings to the broader population of nurses, as the sample may not be fully representative of the entire nursing workforce in Saudi Arabia. These factors should be considered when interpreting the results of this study.

5. CONCLUSION

Burnout was significantly associated with poorer job performance. Additionally, nurses with burnout rated themselves as poor performers, than those without burnout. We recommend further research in this field.

Acknowledgement

Not available.

Informed consent

Not applicable.

Funding

This study has not received any external funding.

Ethical approval

The ethical guidelines for Human Subjects are followed in the study.

Conflict of interest

The authors declare that there is no conflict of interests.

Data and materials availability

All data sets collected during this study are available upon reasonable request from the corresponding author.

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